2. FIELD KEY TO THE PLANT COMMUNITIES OF AGATE FOSSIL BEDS NATIONAL MONUMENT

This key may not apply in grazed portions of the mapping area outside the monument

1. Site >25% vegetated by woody plants >0.5 m tall

    2. Dominant woody plant stratum >3 m tall.............**Populus deltoides - (Salix amygdaloides) / Salix exigua Woodland**

    2. Dominant woody plant stratum <3 m tall

        3. Willows (*Salix exigua, S. lutea*) dominant.............................**Salix exigua Shrubland**

        3. Willows uncommon or absent

            4. Tallest stratum dominated by *Symphoricarpos occidentalis* ....**Symphoricarpos occidentalis Shrubland**

            4. Tallest stratum dominated by herbaceous plants or a mixture of herbaceous plants and shrubs..**Juncus balticus Herbaceous Vegetation**

1. Site <25% vegetated by woody plants >0.5 m tall

    5. Site dominated by forbs (or nearly equal amounts of forbs and graminoids)

        6. Site dominated by annual forbs (*Atriplex heterosperma*, *Iva xanthifolia*, *Lactuca serriola*, *Helianthus* spp.)

                7. Site located in floodplain; *Atriplex heterosperma* or *Iva xanthifolia* usually abundant.....................**Annual-dominated Floodplain Disturbance Community**

                7. Site located in uplands (usually valley bottoms); *Helianthus annuus, Lactuca serriola, Salsola* spp. usually abundant..............**Upland Disturbance Community**

        6. Site dominated or co-dominated by perennial forbs (or subshrubs <0.5 m tall), including *Artemisia frigida, Cirsium arvense, Glycyrrhiza lepidota, Gutierrezia sarothrae*, or *Solidago* spp.

            8. Slope of site >15%

9. Forb density obviously > graminoid density. Unvegetated surface predominately of exposed rock ....**Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation**

        9. Forb density ≈ graminoid density

10. *Carex filifolia* and *Stipa comata* among the most common graminoids, overall vegetative cover usually >50%
Stipa comata - Bouteloua gracilis - Carex filifolia Herbaceous Vegetation / Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation Mosaic

10. *Schizachyrium scoparium* and *Muhlenbergia pungens* generally more common than either *Carex filifolia* or *Stipa comata*, overall vegetative cover usually <50%................................ **Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation**

8. Site nearly level (slope <10%)

11. Site densely vegetated (>90%), located in floodplain.............**Juncus balticus Herbaceous Vegetation**

11. Site sparsely to moderately vegetated (<70%), located in uplands

12. Site located in valley bottom................................**Stipa comata - Bouteloua gracilis Gravel Herbaceous Vegetation**

12. Site located on crest of hill

13. Forb density much > graminoid density, vegetative cover <50%**Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation**

13. Forb density ≤ graminoid density...... **Stipa comata - Bouteloua gracilis - Carex filifolia Herbaceous Vegetation / Schizachyrium scoparium - Bouteloua (curtipendula, gracilis) - Carex filifolia Herbaceous Vegetation Mosaic**

5. Site dominated by graminoids

14. Site dominated by coarse aquatic graminoids >1.5 m tall (*Typha latifolia, Sparganium eurycarpum*), restricted to low places in floodplain............**Typha latifolia Western Herbaceous Vegetation**

14. Site dominated by slender graminoids <1.5 m tall (grasses, sedges, rushes)

15. Site dominated by annual grasses (usually *Bromus tectorum*)..**Upland Disturbance Community**

15. Site dominated by perennial graminoids

16. *Carex filifolia* cover >10%, sites usually on hilltops and upper or middle slopes (sometimes low slopes and valley bottoms)........**Stipa comata - Bouteloua gracilis - Carex filifolia Herbaceous Vegetation**

16. *Carex filifolia* cover <10%; sites on middle and lower slopes, valley bottoms, and floodplain

17. Sites dominated by non-native grasses (*Agropyron cristatum* or *Bromus inermis*).....................**Seeded Grassland Community**

17. Sites dominated by native grasses

      18. Sites present in uplands (including upper floodplain terraces which do not flood), usually dominated by grasses

            19. *Calamovilfa longifolia* and/or *Stipa comata* dominant, mostly slopes and valley bottoms **Calamovilfa longifolia - Andropogon hallii Herbaceous Vegetation**

            19. *Pascopyrum smithii* and/or *Poa pratensis* dominant, *Equisetum laevigatum* and *Cirsium floodmanii* commonly present, mostly upper floodplain terraces............**Pascopyrum smithii Herbaceous Vegetation**

      18. Sites restricted to floodplain and old river channels, sedges and/or rushes usually co-dominant ....**Juncus balticus Herbaceous Vegetation**